Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Implementing Kari's Law and Section 506 of RAY BAUM'S Act	)	PS Docket No. 18-261
	)	
	)	
Inquiry Concerning 911 Access, Routing, and Location in Enterprise Communications Systems	)	PS Docket No. 17-239

COMMENTS OF VERIZON

I. INTRODUCTION

Consumers use many different technologies to communicate with one another and with public safety answering points ("PSAPs") and first responders, and their preferred technologies evolve over time. The 911 and enhanced 911 services and capabilities on which consumers rely have necessarily evolved as well to adapt to consumers' expectations, PSAP capabilities and the capabilities and limitations of the wireline, wireless or VoIP service involved. As Congress reaffirmed in Kari's Law and more recently in RAY BAUM'S Act, though, consumers dialing 911 need one thing regardless of the technology or service they use: to get help as quickly as possible by easily reaching the PSAP. The Commission can achieve Congress's Kari's Law objectives by implementing straightforward rules that focus on an enterprise's multiline telephone system ("MLTS") direct dialing capability while not micromanaging the relationships among different stakeholders. In implementing the RAY BAUM'S Act, the Commission should focus on the characteristics of each particular service to determine whether, how, and when dispatchable location information should be included with a 911 call.

II. KARI'S LAW REGULATIONS SHOULD FOCUS ON SYSTEM CAPABILITY, NOT ON DETAILED REGULATION OF IMPLEMENTATION.

Verizon supports the Commission's draft rule implementing the statute's 911 direct dialing requirement.[1] The February 16, 2020 due date to meet the statute's direct dialing and other requirements is generally feasible for systems installed after that date, if covered entities begin incorporating the dialing restrictions and routing capabilities into their systems in a timely manner. And the scope of the draft rules is appropriately targeted at systems interconnected to the PSTN. This approach is consistent with the Commission's traditional approach to consumers' and businesses' 911 dialing expectations,[2] and preserves flexibility in developing new purely private, internal enterprise systems.

The Commission's proposed central location notification rule is also straightforward and consistent with the statute's focus on timely delivery of emergency-related information to a customer-designated location. The rule also correctly leaves the details of implementation to arrangements between manufacturers, sellers and lessors on one hand, and installers, operators and managers and their customers on the other.[3] The statute focuses on the *system's* notification capability, not how the customer chooses to configure it. And as Congress recognized, the technical details of how the capability is implemented will vary among enterprise customers

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1 *See Implementing Kari's Law and Section 506 of RAY BAUM'S Act, Inquiry Concerning 911 Access, Rouging, and Location in Enterprise Communications Systems,* Notice of Proposed Rulemaking, PS Docket Nos. 18-261 and 17-239, FCC 18-132, ¶ 18 and App. A (2018) ("*Notice*") (proposed rule section 9.16(a)(1)).

2 *See Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Report and Order and Second Further Notice of Proposed Rulemaking, 18 FCC Rcd 25340, ¶ 51 (2003) ("*E911 Scope Order*").

3 *See Notice* ¶¶ 20-27.

based on their size and resources, and the particular network configuration involved.[4] For example, enterprises with a large campus or multiple sites may choose to deliver the notification to a single 24/7 central security or management office. In contrast, smaller enterprises may instead route the notification to a designated management employee, or to an outside number after regular office hours.[5] And the Commission should not micromanage the relationships between covered entities and their customers;[6] the former will need to rely on the representations of the enterprise customer regarding any appropriate destination point for the notification, as the customer is ultimately responsible for matters such as office design, staffing levels, and employee training and duties.

Applying Kari's Law requirements to systems that enable outbound-only 911 dialing is likely feasible in many cases.[7] The scope of such requirements, though, should focus on users' expectations.[8] For example, Kari's Law rules should apply to protect users *not* employed by the enterprise or otherwise unfamiliar with the system who use it for outbound-only dialing. On the other hand, if the outbound-only system has a defined and restricted user group that is uniformly

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4 *See* 47 U.S.C. § 623(c) (notice can be provided to either "central location" or "another person or organization regardless of location"); H.R. 582, *Kari's Law Act of 2017, Section by Section Analysis*, 163 Cong. Rec. H589 (daily ed. Jan. 23, 2017) (statute "requires the system to designate a central point of contact, but allows the MLTS owner or operator some flexibility in determining the most appropriate contact, whether in the building or otherwise.").

5 *See Notice* ¶ 24.

6 *See id.* ¶ 25.

7 It is unclear whether Kari's Law applies to systems that are not fully interconnected. *See id.* ¶ 29.

8 *Cf. E911 Scope Order* ¶¶ 18, 51 n.183 (criteria for applying E911 to a service includes whether "it offers real-time, two-way voice service that is interconnected to the public switched network on either a stand-alone basis or packaged with other telecommunications services" and "the customers using the service or device have a reasonable expectation of access to 911 and E911 services").

familiar with and trained in the enterprise's calling practices, and 911 is the *only* outbound number that users can dial, the direct dialing capability may be less critical—and may give enterprises incentive to not enable *any* 911 dialing at all (which has its own public safety implications). The better distinction thus may be whether users other than the enterprise's employees can use the system for outbound dialing. In any case, input from PSAP interests on this question is important, given their experience handling 911 calls that do not include a valid callback number.

Enforcement of Kari's Law also should be straightforward and focus on system capabilities. By its terms, Kari's Law applies to the *capabilities* of systems installed or substantially upgraded after the 2020 deadline. But the statute does not impose any notification requirements on either new *or* existing systems. Should the Commission adopt a consumer education requirement for pre-February 2020 legacy systems that are not Kari's Law-capable, however, the Commission should focus on systems available to users outside the enterprise, and not limit the permissible notification method to stickers or labels.[9] The sticker/label rule for interconnected VoIP services was designed with end user retail consumers in mind.[10] Operators and managers of enterprise systems, however, have a different relationship with an end user employee than, say, a hotel does with a guest. Alternative notification methods that are reasonably targeted to the user(s) in question, such as device or monitor displays or priority employer-employee communications, should be permitted as well. Finally, the Commission

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9 *See Notice* ¶ 41.

10 *In the Matters of IP-Enabled Services E911 Requirements for IP-Enabled Service Providers*, First Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 10245, ¶ 48, n.156 (2005).

should not adopt the proposal to presumptively hold a manager responsible for compliance.[11] Such a presumption would not reflect the variety of contractual arrangements that can allocate implementation and system maintenance duties among installers, operators, managers, and enterprise customers. The Commission should instead assess compliance based on how the contractual arrangements allocate the respective responsibilities.

III. ANY NEW DISPATCHABLE LOCATION REQUIREMENTS SHOULD APPLY ON A SERVICE-SPECIFIC BASIS.

In exempting the Commission's previous conclusions regarding providing dispatchable location information for mobile wireless voice services from this rulemaking, Congress contemplated that the agency would reach different conclusions "regarding the accuracy of the [dispatchable location] for a 9-1-1 call" and when and whether providing dispatchable location information is feasible and appropriate for different technologies and services.[12] The Commission's 2015 application of dispatchable location information requirements to mobile wireless 911 calls reflects the technical realities and limitations of wireless services. Many of these limitations, however, will be less relevant in the fixed and nomadic context where the service provider or user can more easily determine a more precise address. Many of the Commission's prior determinations in the mobile wireless context will thus not be relevant to many of the services discussed in the *Notice* (and vice-versa).

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11 *See Notice* ¶ 44.

12 *See Consolidated Appropriations Act, 2018*, Pub. L. No. 115-141, § 506(b) (2018).

A. Companies Should Be Able To Provide Dispatchable Location Information on Many Fixed Services But Each Will Have Unique Implementation Challenges.

For fixed MLTS, fixed telephony and fixed interconnected VoIP services, additional detail like floor, apartment or suite number is typically a standard component of their ALI solutions. Delivery of dispatchable location information would thus be feasible for many fixed services. Each service, however, may face unique implementation issues. Providing dispatchable location information uniformly for all IP-based MLTS, for example, may take time for new technical standards and to incorporate the capability into new systems so that the format of address information delivered to PSAPs is consistent across service providers. And unlike other fixed services in which the service provider often has direct access to more granular dispatchable location information via billing and service records, MLTS operators and managers depend on their business customers and even the customers' end user employees to identify, implement and maintain accurate dispatchable location information. In some cases, the appropriate dispatchable location also may not be the caller's precise office address, but rather the address of the entrance where first responders can access the premises.

The location validation method appropriate for a fixed system also will differ from that of a mobile or nomadic service.[13] The address associated with a fixed system, by definition, should not change absent a significant change in the status of the account, so one-time customer verification of the dispatchable location at service initiation and significant account changes (like a change in address) would ordinarily suffice. Mobile or nomadic services, in contrast, would

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[13] *See Notice* ¶ 57.

require ongoing or call-specific validation because of the user's ability to originate calls at different locations.

The *NPRM* correctly concludes that there is no good reason to preclude the delivery of additional location information that may be helpful to a PSAP, provided it is information the PSAP is able to receive and process.[14] As the *Notice* explains, that information could serve a useful validation function, and can be critical in those instances when dispatchable location may not be available.[15] And the rules should not presume a single solution exists to generate a dispatchable location, or otherwise preclude the use of any particular technologies or solutions to determine it, provided that the address is within an adequate degree of confidence/uncertainty developed with input from PSAP stakeholders.[16] As drafted, the proposed rules would meet this important technology neutral standard.

B. Mobile Wireless Text-to-911 Services Are Already Migrating to Mobile Wireless E911 Capabilities.

Mobile wireless text messaging services are transitioning to more robust IP-enabled services that will use the forthcoming wireless dispatchable location and other enhanced 911 location capabilities that the Commission excluded from the scope of the *Notice*. The transition to IP-enabled LTE networks, and global text telephony (GTT) (i.e. real-time text or RTT) solutions, that leverage VoLTE's E911 capabilities, will most effectively improve location accuracy for text-based communications to PSAPs.[17] Verizon and others in the wireless industry worked diligently through 2016 and 2017 to complete necessary standards, network development

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14 *See id.* ¶ 64.

15 *Id.*

16 *See id.* ¶ 59.

17 *See* Verizon Comments, PS Docket Nos. 11-153 and 10-255 (Oct. 16, 2014).

and device testing, and on October 2, 2018, Verizon participated in a demonstration of commercially available RTT capabilities before the Commission's Disabilities Advisory Committee.[18] The Commission should allow and encourage the broader communications ecosystem to continue on this course.

C. Different Requirements Should Apply to Nomadic and Fixed Interconnected VoIP Services.

The Commission should assess the feasibility of providing dispatchable location information for nomadic interconnected VoIP services separate from fixed services, and better clarify how (if at all) any requirements to provide it should apply to particular nomadic services. The *Notice* acknowledges the important differences between fixed and nomadic services, and the service level rules would allow a nomadic VoIP provider to provide either dispatchable or registered location information.[19] The draft rule, however, also appears to define both terms identically, making this a distinction without a difference.[20] Many nomadic VoIP providers must rely on a customer or end user to timely and accurately provide a dispatchable location and, to be consistent with the intent of the *Notice*, the rules should maintain the current registered location approach as a meaningful option for these services.

Nor should the rules preclude the possibility that a sufficiently validated registered location can serve as the appropriate dispatchable location in certain circumstances. Validation methods and an appropriate uncertainty standard for registered location, developed with public

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[18] *See* Verizon Report, GN Docket No. 15-178 (Nov. 13, 2017); https://www.fcc.gov/news-events/events/2018/10/public-safety-answering-points-psaps-education-day-real-time-text.

[19] *See Notice* ¶ 77.

[20] *See id.* App. A (proposed rule section 9.3, defining registered location after February 16, 2020 as [t]he most recent information obtained by a provider of interconnected VoIP service, [or] 911 VoIP service … that identifies the dispatchable location of an end user").

safety input, may provide a PSAP with actionable information that meets the dispatchable location definition. As one example, if a registered location for a nomadic service is the subscriber's address for a detached single family home, and that address is corroborated by a matching x/y coordinate or other accurate location method with adequate certainty, that information may be the most helpful to first responders.

Finally, the Commission's proposal to apply the interconnected VoIP 911 rules, including the registered location choice, to newly defined outbound-only "911 VoIP services" may be overbroad. In the NET 911 Act, Congress in 2008 authorized the Commission to extend its VoIP 911 rules to other services that are "widely accepted and fungible substitutes for telephony."[21] It is unclear whether all outbound-only 911 VoIP services meet that standard if there is no other connectivity to the PSTN. In addition, the proposed rules' treatment of such services is unclear. For example, the rule as drafted would require that calling party number information be provided on *all* 911 VoIP services. That information could enable callback for a service that supports both outbound and inbound calling, but would not help for outbound-only services. And the concerns described above regarding the impact of the proposed rules on nomadic services apply to nomadic outbound-only services as well.

D. Applying a February 2020 Compliance Date To Provide Dispatchable Location Information Is Not Feasible for All Services.

It is premature to impose a uniform February 2020 compliance deadline across all the services named in the *Notice* until the feasibility of providing dispatchable location information is determined for each, particularly for services other than fixed interconnected services. The

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[21] 47 U.S.C. § 615b(8); H.R. Rep. No. 110-442, *911 Modernization and Public of 2007*, at 16 (2007).

delivery of 911 call information required under Kari's Law is a different and simpler process than determining a 911 caller's location. Nomadic, mobile, and outbound-only services will raise different issues than fully interconnected fixed services, for service providers and PSAPs alike. How and whether dispatchable location requirements should be applied to a particular service (if at all) may warrant different implementation timetables based on any necessary standards updates, equipment and software changes, and PSAP capabilities.

IV. CONCLUSION

For the foregoing reasons, the Commission should move forward with its simple, straightforward rules implementing Kari's Law, and apply any new dispatchable location requirements, where appropriate, on a case-by-case basis that accounts for different services' location capabilities.

Respectfully submitted,

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December 10, 2018